

*Scirpus acutus* - (*Scirpus fluviatilis*) Freshwater Herbaceous Vegetation  
(Freshwater Bulrush Marsh)

COMMON NAME Hardstem Bulrush - (River Bulrush) Freshwater Herbaceous Vegetation  
SYNONYM Freshwater Bulrush Marsh  
PHYSIOGNOMIC CLASS Herbaceous Vegetation (V)  
PHYSIOGNOMIC SUBCLASS Perennial graminoid vegetation (V.A)  
PHYSIOGNOMIC GROUP Temperate or subpolar grassland (V.A.5)  
PHYSIOGNOMIC SUBGROUP Natural/Semi-natural (V.A.5.N)  
FORMATION Semipermanently flooded temperate or subpolar grassland (V.A.5.N.1)  
ALLIANCE SCIRPUS ACUTUS - (SCIRPUS TABERNAEMONTANI)  
SEMIPERMANENTLY FLOODED HERBACEOUS ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM PALUSTRINE

RANGE

**Voyageurs National Park**

This community type occurs on sheltered to moderately wave exposed sites, primarily on the large lakes.

**Globally**

This community is found in Iowa, Minnesota, South Dakota, North Dakota, southern Manitoba, and northwestern Ontario.

ENVIRONMENTAL DESCRIPTION

**Voyageurs National Park**

The Freshwater Bulrush Marsh occurs on sheltered to moderately wave exposed sites, primarily on the large lakes. Water depth is typically 0.5-1.5 meters and substrate is clay, muck or sand. The water regime is permanently flooded.

**Globally**

This community is found on wetland sites that are flooded for most or all of the growing season. Weaver (1960) found abundant *Scirpus acutus* in water 0.3-1.6 m deep. Soils are usually mostly mineral but can contain significant organic matter (Harris *et al.* 1996). Dix and Smeins (1967) found the soils to be humic gleys and mucks in North Dakota, while in northwestern Ontario this community is favored on sandy substrates (Harris *et al.* 1996).

MOST ABUNDANT SPECIES

**Voyageurs National Park**

<u>Stratum</u>	<u>Species</u>
Graminoid	<i>Scirpus tabernaemontani</i> , <i>Scirpus acutus</i> , <i>Scirpus fluviatilis</i>

**Globally**

<u>Stratum</u>	<u>Species</u>
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CHARACTERISTIC SPECIES

**Voyageurs National Park**

*Scirpus tabernaemontani*, *Scirpus acutus*, *Scirpus fluviatilis*

**Globally**

*Scirpus tabernaemontani*, *Scirpus acutus*, *Scirpus fluviatilis*

VEGETATION DESCRIPTION

**Voyageurs National Park**

This community is dominated by *Scirpus tabernaemontani*, *Scirpus acutus* and, to a lesser extent, *Scirpus fluviatilis*. Cover of these dominants is typically 50-90%, though in rare cases may be much lower. Floating leaf aquatics may be present at low cover, especially *Nuphar variegatum*, *Nymphaea odorata*, *Lemna minor*, and *Lemna trisulca*. Submerged aquatics may also be present at low cover and include *Potamogeton zosteriformis*, *Potamogeton richardsonii*, *Potamogeton friesii*, *Myriophyllum sibiricum*, and *Utricularia vulgaris*.

**USGS-NPS Vegetation Mapping Program**  
**Voyageurs National Park**

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**Globally**

Tall hydrophytic graminoids, particularly *Scirpus acutus* and *Scirpus fluviatilis*, dominate the vegetation. These two species may grow taller than 2-m (Weaver 1960) and sometimes nearly exclude other species. Other species that can be present to common include *Carex atherodes* (especially in the shallower parts of the community), *Lemna* spp., *Scirpus tabernaemontani*, *Typha latifolia*, and *Utricularia macrorhiza*. *Scirpus tabernaemontani* can be a co-dominant in places. Floating leaved and submergent plants have low cover (Harris *et al.* 1996). This community often occurs as dense stands with interspersed channels or pools of open water.

CONSERVATION RANK G4G5.

DATABASE CODE CEGL002225

COMMENTS

**Voyageurs National Park**

Diagnostic features of the type are *Scirpus validus*, *Scirpus acutus*, and *Scirpus fluviatilis*. It is analogous to Ontario's W7 (Harris *et al.* 1996).

REFERENCES

Harris, A. G., S. C. McMurray, P. W. C. Uhlig, J. K. Jeglum, R. F. Foster, and G. D. Racey. 1996. Field guide to the wetland ecosystem classification for northwestern Ontario. Ont. Minist. Nat. Resour., Northwest Sci. Tech. Field Guide FG-01. Thunder Bay, Ont. 74 p.

**Note:**

This association is found in two different map classes:

- 1) [Freshwater Bulrush Marsh](#)
- 2) [Deep Marsh Mosaic / Complex](#)